GERASIMOVA, R.I.

USSR/Nuclear Physics - Elementary Particles.   C-3

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8641

Author   : Varfolomeyev, A.A., Gerasimova, R.I., Zamchalova, Ye.A.,
             Podgoretskiy, M.I., Shcherbakova, M.N.
Inst   : Academy of Sciences, USSR.
Title   : Energy Spectrum of Negative Pions, Formed by Cosmic Rays
             in a Photo Emulsion.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 6, 1164-1166.

Abstract : The authors give the energy spectra obtained for 195 posi-
             tive and 328 negative pions, generated in the R-5 emulsion
             (emulsions 330 and 450 mecrons thick, 10 cm in diameter),
             exposed to cosmic rays in the stratosphere. Corrections
             are made to the obtained data to take into account the
             finite dimensions of the emulsion blocks.. The author be-
             lieves ti possible that in the negative pion spectrum, in
             the range of 10 -- 30 Mev, there is a small maximum which
             in their opinion can be interpreted as the decay of Λ^0

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USSR/Nuclear Physics - Elementary Particles.   C-3

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8641

          particles, absorbed by the same nucleus. The shift in
          the position of the maximum can be explained by the fact
          that the Λ^0 particle may turn out to be a lower energy
          level than the least bound neutron, and also by the slo-
          wing down of the negative pion in the Coulomb field of
          the nucleus.

Card 2/2

EERASIMOVA, R. I.

USSR/Nuclear Physics - Elementary Particles.

C-3

Abs Jour   : Ref Zhur - Fizika, No 4, 1957, 8634

Author   : Varfolomeyev, A.A., Gerasimova, R.I.
Inst   : Academy of Sciences, USSR.
Title   : Disintegration of Beryllium and Carbon Nuclei as a
              Result of π^--Meson Capture.

Orig Pub   : Zh. eksperim. i teor. fiziki, 1956, 30, No 6, 1166-1167.

Abstract   : Seven cases were observed of the absorption of π^--mesons
              in microcrystals of beryllium and 12 cases of absorption
              in microcrystals of carbon, introduced into the photogra-
              phic emulsion. The characteristic feature of the above
              $\int$ - stars is the absence of tritons with energies grea-
              ter than 10 Mev, and the fact that the mean energy of
              the emitted protons does not exceed 10 Mev. In the
              author's opinion, the above data are evidence that in the
              primary act a greater portion of the rest energy of the
              π^--meson is received by 1 -- 2 neutrons which do not ex-
              perience secondary collisions in such light nuclei, as
                                              beryllium and carbon.

Card 1/1

GERASIMOVA, R.I.

CARD 1 / 2   PA - 1668

SUBJECT   USSR / PHYSICS
AUTHOR   BARFOLOMEEV,A.A., GERASIMOVA,R.I., KARPOVA,L.A.
TITLE   A Possible Example for the Anomalous Decay of a Hyperfragment.
PERIODICAL Dokl.Akad.Nauk, 110, fasc.5, 758-760 (1956)
           Issued: 12 / 1956

A packet of 56 emulsion layers of 330μ thickness each, which was irradiated
in the stratosphere, was used for the purpose of studying unstable particles.
One of the secondary stars found was ascribed to an unstable fragment decaying
with an abnormally low emission of energy. The primary star was of the type
$18 + 4n$ and it emitted a particle which decayed after passing through 39μ
and emitting two charged particles b and c. Both came to a standstill in the
emulsion after $15,5$ mm and $4,5\mu$ respectively. The traces of a, b and c were
complanar up to 2^0. The charge of the particle a was $z_a \leqslant 3$ and probably even
$z_a < 3$. However, at least the mass of the particle a was probably larger than
that of the proton. The trace of b originated from a negative pion which had
come to a stop in the emulsion. Taking account of a possible straggling its
energy is assumed to be $29,4 \pm 1,2$ MeV. In the case investigated here it is im-
possible that a Σ-hyperon is concerned. It follows from the shortness of the
trace that spallation may be caused by the capture of a Σ-hyperon by a light
nucleus of the type C,N,O, but not by a heavy nucleus like Ag and Br.
The process investigated is apparently the decay of an instable fragment
associated to a Λ^0-particle. No decay scheme with the creation of two particles

Dokl.Akad.Nauk,$\underline{110}$,fasc.5, 758-760 (1956) CARD 2 / 2   PA -- 1668

agrees with the experimental results. Among the analyzed schemes with creation of three particles the following come into question:

$$_{\Lambda}H^3 \to \pi^- + He^3 + \gamma + Q_1 \; ; \; Q_1 = 50 \pm 8 \text{ MeV}, \quad B_{\Lambda} = -7,5 \pm 9 \text{ MeV}.$$

$$_{\Lambda}H^4 \to \pi^- + He^4 + \gamma + Q_2 \; ; \; Q_2 = 51 \pm 9,5 \text{ MeV}, \quad B_{\Lambda} = -6 \pm 10 \text{ MeV}.$$

$$_{\Lambda}He^7 \to \pi^- + Li^6 + n + Q_3 \; ; \; Q_3 = 35,5 \pm 2,2 \text{ MeV}, \quad B_{\Lambda} = 4,2 \pm 2,4 \text{ MeV}.$$

At present about 100 acts of decay of hyperfragments are known. If the schemes (1) or (2) are recognized as valid the case investigated here might correspond to a relative probability of the radiation decay of the hyperfragment of $\sim 1\%$. Apparently the creation mechanism of the γ-quantum can, in the case under investigation, be the same as on the occasion of the anomalous $\pi - \mu -$ decay with a short range of the emitted myons and as in the case of the radiation decay of a τ-meson with the decay scheme $\tau \to 3\pi + \gamma$ (this is the case all the more as, according to T.EGUCHI, Phys.Rev.$\underline{85}$,943 (1952), and other works, the probability of the radiation decay of the fragment and also the probability of the reactions $\pi \to \mu + e + \gamma$, $\tau \to 2\pi + \gamma$ and $K \to \mu + V + \gamma$ are near 1%). Of the remaining rays of the primary ray 20 traces belong to stable particles and 2 traces do not end in the emulsion packet.

INSTITUTION:

GERASIMOVA, R.I.

56-5-5/55

AUTHOR
TITLE

VARFOLOMEYEV, A.A., GERASIMOVA, R.I., TUMANYAN, V.A.
Multiple Electron Production in a High Energy Electron-Photon Shower
(Mnozhestvennoye obrazovaniye elektronov v elektronno-fotonnom livne bol'shoy energii. Russian)

PERIODICAL

Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr5 , pp969 - 973
(U.S.S.R.)

ABSTRACT

In connection with the systematic investigation of electron-photon showers occuring in the nuclear emulsion layers in the stratosphere an unusual formation of showers was recorded. A 150 - layer plate of the emulsion "P" was used as photoplate. The thickness of a layer was about 400μ and the plates had a diameter of 10 cm.

Exposure was carried out for about 10 hours in an altitude of about 20 - 24 km. The density of orbital traces in the emulsion was 37 grains per 100μ in the case of a minimum of ionozation.

The unusual shower was caused by single electrons the path of which in the individual layers of the emulsion was ~ 0.5 cm.

21 secondary electron-positron pairs were found, of which 12 had an energy of $\sim 10^8$ eV.

An exact analysis of these traces allows the conclusion that the primary electrons causing the effect had an energy of from 0,6 to $2 \cdot 10^{12}$ eV.

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Multiple Electron Production in a High Energy Electron-Photon Shower

As a particular feature when analyzing the traces it was found that 6 electron-positron pairs always in couples occured and must therefore also have been formed simultaneously.

ASSOCIATION
PRESENTED BY   Not given
SUBMITTED
AVAILABLE   Library of Congress

Card 2/2

GERASIMOVA, R.I.

"ELECTRON-PHOTON CASCADES WITH ENERGIES FROM 10^{11} TO 10^{-13} ev IN NUCLEAR EMULSIONS"

R.I. Gerasimova, A.A. Varfolomeyev, I.I. Gurevich, L.A. Makaryina, A.S. Romantseva, S.A. Chuyeva

Fifteen electron-photon cascades with energies from 10^{11} to 10^{13} ev, recorded in six emulsion stacks with a total volume of 10 l, have been investigated.

The energies of the primary photons evoking the cascades were determined by the energy spectrum of the cascade electrons at a depth of $2.5 \div 3t_0$ (t_0 - rad. unit).

The grain density and the gap density were measured for the first pairs. In all the pairs with energies 3×10^{11} ev, a decrease in grain density at the apes caused by the screening effect was discovered.

The following experimental relation of the ionization losses of pair (1) was obtained:

where Ipe is the specific ionization electron loss at the ionication plateau, x is the distance from the apes of the pair in cm, and E, is the energy of the photon which produced the pair.

The expression obtained for I/21pe may be used to determine the E energy from experimental values for I. An estimation of the E error is given, taking into consideration the screening effect.

The number of electron-positron pairs produced at depths of $1.0t_0$ and $1.5t_0$ was measured.

GERASIMOVA, R.T. (CONTINUED)

The results agree with the calculated data obtained by the Monte Carlo method, taking into account the effect of the medium on Bremsstrahlung (Landau-Pomeranchik and Ter-Mikaelyan effects).

For 10 cascades with e 1.8×10^{11} ev, the probability of P ( )^2 from the criterion / ^{2}, is 2.5 + 5% when compared with the curves which do not consider the effect of the medium, and 80-95% when compared with the calculations that take into consideration the effect of the medium on the Bremsstrahlung.

report presented at the International Cosmic Ray Conference, Moscow 6-11 July 1959

GERASIMOVA, R.I.

"DIRECT PRODUCTION OF ELECTRON-POSITRON PAIRS BY HIGH ENERGY ELECTRONS"
R.I.Gerasimova, L.A. Makaryina, Ap.P. Mishakova, A.S. Romantseva, G.S. Stolyarova,
V.A. Tumanyan, S.A. Chyueva, A.A. Varfolomeyev,

The cross-section of direct production of electron-positron pairs by high energy
electrons was measured experimentally. For this purpose, a study was made of isolated
electron-photon cascades and the photon component of high energy nuclear interactions
in emulsion stacks exposed to radiation in the stratosphere. In order to exclude
spurious cases of direct pair production, which constitute t e main difficulty in
experimental measurement of the cross-section of such pairs, the calculation was
carried out by the Monte Carlo method.

The calculation was made for three values of primary electron energy: 10; 100
and 1,000 Bev, taking into consideration two possible variants of the Bremsstrahlung
spectrum: Bethe-Heitler and Migdal variants (Laundau-Pomeranchuk and Ter-Mikaelyan
effects). A method for determining the energy of ultra-relativistic electrons from
the lateral distribution of the apexes of electron-positron pairs is suggested.

During the experimental measurement of very high electron energies, certain
possible sources of underestimation were eliminated.

The cross section of direct pair production by high energy electrons was found
to be in agreement with Bhabha's calculation within the limits of experimental error.

report presented at the International Cosmic Ray Conference, Moscow 6-11 July 1959

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S/627/60/002/000/024/027
D299/D304

3.2410 (2005, 2705, 2805)

AUTHORS: Varfolomeyev, A. A., Gerasimova, R. I., Gurevich, I.I.,
Makar'ina, L.A., Romantseva, A. S., and Chuyeva, S. A.

TITLE: Electron-photon showers with energies of $11^{11} - 10^{13}$ ev.
in nuclear emulsions

SOURCE: International Conference on Cosmic Radiation. Moscow,
1959. Trudy. v. 2. Shirokiye atmosfernyye livni i kas-
kadnyye protsessy, 299-306

TEXT: A detailed investigation was carried out of 15 electron-pho-
ton showers with energies $> 10^{11}$ ev., at low depths. In contradis-
tinction to other works, the results are compared with those ob-
tained for cascades by the Monte Carlo method. Six emulsion stacks
were used, with total volume of about 10 liters. In 5 of the
stacks of emulsion Р-НИКФИ (R-NIKFI), the grain density of relati-
vistic electrons was $30 - 35$ grains per 100μ. The energy E_γ of
primary quanta which generate the shower, was determined from the

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Electron-photon showers ...

number of cascade electrons of energy higher than $\mathcal{E}_c$ = 300 Mev, at a depth of 2.5 - 3.0 t_o. A table lists (for comparison) the values of E_f, obtained by the Monte Carlo method and by formula

$$R = \frac{1}{16,1} \left\{ 45,0 + \ln \left[\left(\frac{2x}{E} \right)^2 (1 + 140 \; x) \right] \right\} \qquad (1)$$

where x is the distance from the pair vertex in cm; this formula is semiempirical and represents the ratio of ionization losses of pairs to those of relativistic electrons; the ionization losses are due to mutual shielding of electron and positron fields. In the experiments, particular care was taken to detect the vertices of the electron-positron pairs, formed at depths $\leqslant$ 1.5 t_o. After determining the lateral shower distribution, the energy of the electrons of the pairs was measured by means of multiple scattering (to an accu-

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Electron-photon showers ...

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racy of 20 - 30%) for energies of up to $(5-7) \cdot 10^8$ ev. The total
number of pairs formed at depths $\leqslant 1.0$ t_0 and $\leqslant 1.5$ t_0 with energies
higher than (1-2) Mev, is plotted in two figures, from which it is
evident that the experimental points fit better the curve which
takes into consideration the influence of the medium on the brems-
strahlung (the curve obtained by Migdal's formula); the curve ob-
tained by Bethe-Heitler's formula does not fit the experimental re-
sults. The figures also show that not one of the 15 showers under
consideration is anomalous. Apparently, the majority of so-called
"anomalous" showers, described in literature, can be explained by
statistical fluctuations in the cascades or by improper determina-
tion of the energy of primary electron-positron pairs. Another fi-
gure exhibits the experimental curves of longitudinal shower de-
velopment; here, too, no appreciable deviations from the corres-
ponding theoretical curves are observed. A table lists data on the
number of pairs formed at small distances $r < 0.5\mu$ from the nearest
electron track; these data might be useful in analyzing the cross-
section for pair formation by high-energy electrons. There are 4

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Electron-photon showers ...

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D299/D304

figures, 3 tables and 21 references: 10 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: K. Pinkau. Nuovo Cim., 3, 1285, 1956; H. Fay. Nuovo Cim., 5, 293, 1957; J. Iwadare. Phil. Mag., 3, 680, 1958; S. K. Srnivasan, J. S. Butcher, B. A. Chartres, H. Messel. Nuovo Cim., 9, 77, 1958.

Card 4/4

21(8)
SOV/56-36-3-3/71

AUTHORS: Varfolomeyev, A. A., Gerasimova, R. I., Makar'ina, L. A.,
Romantseva, A. S., Chuyeva, S. A.

TITLE: Ionization Along the Tracks of Electron-Positron Pairs of
High Energy (Ionizatsiya vdol' sledov elektronno-pozitronnykh
par vysokoy energii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 3, pp 707-716 (USSR)

ABSTRACT: In the introduction the authors discuss the problem and the
results of several already published works dealing with
this subject. Table 1 contains for the 5 investigated showers
(E-53, 0-202, D-84, D-44 and I-109) the data of the emulsion
piles in which they were recorded (see previous paper by the
same authors, reference 7); table 2 contains a list of the
E_γ-values according to Janossy (Yanoshi) (Refs 10, 12) and

according to Chudakov (Ref 1). (Today it is possible to ob-
tain more exact E_γ-values from curves by the Monte Carlo
method by taking the influence exercised by matter on brems-
strahlung into account. The publication of respective results
has been announced). A very detailed chapter of this paper
Card 1/3   deals with gauging of the emulsions (type R-NIKFI). The follow-

Ionization Along the Tracks of Electron-Positron Pairs of High Energy

ing experimental data concern the track densities of five
high-energy electron-positron pairs in these emulsions. Measure-
ments were carried out on the first pairs of electron-photon
showers. Pair energy was determined from the energy spectrum
of the cascade electrons at a distance of 2.5 - 3 radiation
lengths from the vertex of the first pair. In three cases

pair energy was nearly $.10^{12}$ ev and in two cases it was

approximately 3.10^{11} ev. Track density was determined by two
methods: from the grain density in the track and from the gap
length distribution coefficient. Compared with a particle
for which the specific energy loss is twice as great as the
ionization loss of the electron, the track density of the
pair near the vertex was found to be smaller. This decrease
of the pair track density can be explained by the mutual
screening of the electron and positron during ionization. The
results obtained are compared with the theoretical ionization
curves for pairs calculated by A. Ye. Chudakov (Ref 1). The
authors finally thank Professor I. I. Gurevich for his inter-
Card 2/3   est and discussions, A. A. Kondrashina for his help in

SOV/56-16-3-9/71

Ionization Along the Tracks of Electron-Positron Pairs of High Energy

evaluating measuring results, and D. M. Samoylovich and his
group for developing the piles of emulsion plates. There
are 8 figures, 2 tables, and 21 references, 3 of which are
Soviet.

SUBMITTED: August 18, 1958

Card 3/3

GERASIMOVA, R. I.

Advantages of chemical weed control. Zashch. rast. ot vred. i bol.
5 no.4:15-16 Ap '60.   (MIRA 13:9)

1. Agronom po sashchite rasteniy Rayonnoy traktornoy stantsii.
                            (Herbicides)

VARFOLOMEYEV, A.A.; GERASIMOVA, R.I.; GUREVICH, I.I.; MAKAR'INA, L.A.; ROMANTSEVA, A.S.; CHUYEVA, S.A.

Effect of the density of the medium on bremsstrahlung in electron-photon showers involving energies from 10^{11} to 10^{13} ev. Zhur. eksp. i teor. fiz. 38 no.1:33-45 Jan '60.   (MIRA 14:9)
            (Bremsstrahlung) (Cosmic rays)

APANASENKO, A.D., starshiy nauchnyy sotrudnik; GUMELYA, A.N.; VOLNOVA, N.P., mladshiy nauchnyy sotrudnik; GERASIMOV, N.N., mladshiy nauchnyy sotrudnik; GERASIMOVA, R.V., mladshiy nauchnyy so-trudnik; KON'KOV, A.A., mladshiy nauchnyy sotrudnik [deceased]; MARTYNOV, G.K., starshiy tekhnik; FILIPPOVA, T.V., starshiy tekhnik; SUCHKOVA, Z.Ye., starshiy tekhnik. Prinimal uchastiye AKUL'SHIN, P.K., doktor tekhn.nauk, doktor tekhn.nauk. SVERDLOVA, I.S., red.; SHEFER, G.I., tekhn.red.

[Rules for the intersection of telephone lines in overhead telephone communication networks] Instruktsiia po skreshchi-vaniiu telefonnykh tsepei vozdushnykh linii sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1959. 270 p.
                                                              (MIRA 13:2)
1. Russia (1923- U.S.S.R.) Glavnoye upravleniye mezhdugorodnoy telefonno-telegrafnoy svyazi. 2. TSentral'nyy nauchno-issledo-vatel'skiy institut svyazi Ministerstva svyazi SSSR (for Apana-senko, Volnova, Gerasimov, Gerasimova, Kon'kov, Martynov, Filippo-va, Suchkova). 3. Nachal'nik laboratorii vozdushnykh liniy svyazi TSentral'nogo nauchno-issledovatel'skogo instituta svyazi Mini-sterstva svyazi SSSR (for Gumelya).
    (Telephone)   (Electric lines--Overhead)

STEPANOV, Ye.M.; ANDREYEV, M.N.; OSHAROVA, Ye.A.; GERASIMOVA, S.A.;
ANTUSHEVA, R.I.; TUROVA, R.I.

Effect of different feeding levels on the physiological condition
of the organism of sheep. Trudy VIEV 26:190-192 '62.
                                                (MIRA 16:2)

1. Laboratoriya fiziologii Vsesoyuznogo instituta eksperimental'noy
veterinarii.
                (Sheep—Feeding and feeds)

"A Certain Case of Solution of Convection Problem with Account of Ratio of
Viscosity Coefficient to Temperature"
Uch. Zap Molotovsk. un-ta, 8, No 3, 1954, 87-90

    Equations of convection are solved taking into account the viscosity
in the case of an infinite vertical slit with plane parallel walls heated
to different temperatures. Exact stationary solutions are found in two
cases in which the ratio of viscosity to temperature is linear and may
be expressed by Bachinskiy's formula. The temperature distribution in
this case is linear and the heat transfer from hot to cold wall is deter-
mined by the molecular heat conductivity of the liquid. (RZhFiz, No 9,
1955)

SO: Sum-No 787, 12 Jan 56

GERASIMOVA, S. B.

GERASIMOVA, S. B. — "On the Theory of Convection Phenomena in Binary
Mixtures." Min Higher Education USSR. Molotov State U imeni V. M.
Gor'kiy. Molotov, 1955. (Dissertation for the Degree of Candidate of
Physicomathematical Sciences.)

SO: Knizhnaya Letopis', No 5, Moscow, Feb 1956

38605

S/170/62/005/007/006/010
B104/B112

26.5200

AUTHOR: Gerasimova, S. B.

TITLE: The effect of thermal diffusion on the thermal convection
             of a binary mixture

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 7, 1962, 52-58

TEXT: The steady thermal convection of a binary mixture in a vertical
cavity was investigated, allowing for the effect of thermal diffusion
and making the following assumptions: (1) The velocity, temperature,
pressure, and concentration of the mixture are independent of y;
(2) the velocity of the fluid has only a z-component; (3) the temperature
of the mixture depends only on the transverse coordinate x of the cavity.
A purely mathematical analysis of the system of equations

$$-\frac{1}{\rho_0}\frac{dp}{dz} + \nu\frac{d^2v}{dx^2} + g(\beta T + \alpha c) = 0, \qquad (1)$$

$$\frac{d^2T}{dx^2} = 0, \qquad (2)$$

Card 1/2

The effect of thermal diffusion ...

$$v \frac{\partial c}{\partial z} = D \left(\frac{\partial^2 c}{\partial x^2} + \frac{\partial^2 c}{\partial z^2} \right). \tag{3}$$

shows that the non-uniformities in concentration can be represented by $c(x,z) = Bz + c'(x)$. Thus, Eqs. (1)-(3) can be reduced to a system of ordinary linear differential equations. The distribution of concentration is given by

$$c_1 = \frac{DK_1^2}{\chi C} z - C \left[\frac{K_1^2}{24} \left(\frac{x^5}{5} - \frac{x^4}{2} + \frac{x^3}{3} \right) + \frac{a\lambda}{\beta K_1^2} x \right] + c_0. \tag{18},$$

where K_1 is Rayleigh's diffusion number and c_0 denotes a standard concentration. The great effect of thermal diffusion on thermal convection is demonstrated by a comparison of Eq. (18) with a formula for the distribution of concentration derived without allowing for the effect of thermal diffusion. There are 2 figures.

ASSOCIATION: Politekhnicheskiy institut, g. Perm' (Polytechnic Institute, Perm')

SUBMITTED: February 22, 1962

Card 2/2

LYANDE, V.S.; GLUBOKOVA, P.D.; MIROSHNIKOVA, Ye.Z.; GERASIMOVA, S.S.;
        USOL'TSEV, V.N.

State of the upper respiratory tract and the organ of hearing in
singers and voice students in Khabarovsk. Trudy Khab.med.inst.
no.20:147-155 '60.   (MIRA 15:10)

1. Iz kliniki bolezney ukha, goral i nosa (zav. prof. V.S.Lyande)
Khabarovskogo meditsinskogo instituta.
(KHABAROVSK--SINGERS--DISEASES AND HYGIENE) (RESPIRATORY ORGANS)
                        (EAR)

NIKITINA, O.I.; prinimala uchastiye: GERASIMOVA, S.V.

Diffusion of elements in a specimen during the spectrum analysis
of iron alloys. Sbor.trud. UNIIM no.11:409-416 '65.

(MIRA 18:11)

GLUBOKOVA, P.D., dotsent; MIROSHNIKOVA, Ye.Z., kand.med.nauk; ROKHLIN, N.N., vrach; GERASIMOVA, S.S.

Professor Vol'f Samoilovich Liande, 1893 - ; on his 70th birthday. Vest. otorin. 25 no.5:105 S-O '63.   (MIRA 17:4)

1. Zaveduyushchaya otorinolaringologicheskim otdeleniyem Khabarovskogo meditsinskogo instituta (for Gerasimova).

BOGOYAVLENSKIY, A.F.; OBRASIMOVA, T.A.

Catalytic activness of the oxide Al_2O_3 formed on the anode. Zhur.prikl.khim. 26 no.11:1122-1126 N '53.   (MLRA 6:11)

1. Laboratoriya neorganicheskoy khimii Kazanskogo Gosudarstvennogo universi-teta im. V.I.Ul'yanova-Lenina.   (Alumina) (Catalysts)

GERASIMOVA, T. D.

    "Ecology of the Eider of the Murmansk Shore and Methods of
Rationalizing Eider Husbandry." Sub 5 Nov 51, Moscow City
Pedagogical Inst imeni V. P. Potemkin.

    Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

GERASIMOVA, T.D.; SKOKOVA, N.N.

Ornithogeographical characteristics of Aynov Islands.
Ornitologiia no.2:91-98 '59.   (MIRA 14:7)
    (Bol'shoy Aynov Island--Birds) (Malyy Aynov Island--Birds)

GERASIMOVA, T.D.

State of bird colonies of the Murman Coast. Ornitologiia no.4:11-14
'62.   (MIRA 16:4)
          (Murman Coast—Birds)

BELAY, G.Ye.; GERASIMOVA, T.I.; YATSENKO, A.I.

Kinetics of the graphitization of cerium cast iron. Lit.proizv.
no.7:22-23 Jl '64.   (MIRA 18:4)

TARAN, Yu.N. (Dnepropetrovsk); LEV, I.Ye. (Dnepropetrovsk); YATSENKO, A.I.
    (Dnepropetrovsk); BELAY, G.Ye. (Dnepropetrovsk); Prinimali uchastiye:
    GERASIMOVA, T.I., Inzh.; KURASOV, A.N.

Specific features of the eutectic crystallization of cast iron in-
nnoculated with cerium. Izv. AN SSSR, Met. no.3:131-139 My-Je '65.
                                                    (MIRA 18:7)

FRIDKIN, V.M.; DIBLOVA, A.I.; GERASIMOVA, T.N.; BILYALETDINOV, Kh.S.

Some results of the study of electronic photography and electro-
static printing.   Zhur.nauch.i prikl.fot.i kin. 2 no.4:286-292
Jl-Ag '57.   (MIRA 10:7)

1. Nauchno-issledovatel'skiy institut poligraficheskogo mashino-
stroyeniya.
                        (Xerography)

G E R A S I M O V A, ...

AUTHOR   FRIDKIN, V.M., GERASIMOVA, I.N.,   P .

TITLE   Electric Photography on Luminophores.
              (Elektrofotografiya na lyuminoforakh – Russian)

ABSTRACT   Experiments were carried out in order to obtain images on the surface
              of paper or metals which were coated with a luminescent layer which, at
              the same time, was photoconductive. The following material was used,
              (CdS, ZnS)Cu, which has its maximum photoconductivity at $\lambda = 340$ m, and
              [CdS, ZnS] Ag, which has its maximum photoconductivity at $\lambda = 44$ m. The
              surface of the layer could be charged in the dark by means of the corona
              discharge. The image on the surface of the layer was obtained by projec-
              ting an image on to the surface of the luminescent substance charged in
              this manner by means of a photoenlarging apparatus. The time of exposu-
              re corresponded to the relaxation period of the surface charge which had
              been previously measured for the respective layer. Developing was carried
              out by spraying the layer with inversely charged colored resin particles.
              The particles were charged by means of friction electricity. An additional
              peculiarity of electrophotography was the possibility of watching the lu-
              minescent substances in the dark while they were illuminated by ultravio-
              let light (with 365 mμ wavelength). Good results were also obtained with
              other photoconductive layers, as e.g. ZnO and CdS.

Card 1/2

Electric Photography on Luminophores.   PA - 5146

ASSOCIATION   Scientific Research Institute for Graphical Machine Building
PRESENTED BY   SHUBNIKOV A.V., Member of the Academy
SUBMITTED   26.9.1956
AVAILABLE   Library of Congress
Card 2/2

5(3)   SOV/63-4-3-30/31

AUTHORS: Koptyug, V.A., Gerasimova, T.N. Vorozhtsov Jr., N.N.

TITLE: Migration of Alkylsulfonyl Residue in Alkyl-(1-Chloronaphthyl-8)-Sul-
              fones

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3,
              pp 414-415 (USSR)

ABSTRACT: The study of the reactions of peri-substituted naphthalenes has de-
              monstrated that heating of methyl-(1-chloronaphthyl-8)-sulfones with
              concentrated hydrochloric acid for 5 hours at 200°C causes the irre-
              versible migration of the sulfonyl residue. It has been shown that
              the migration of the alkylsulfonyl residue is characteristic only for
              1,8-isomers and seemingly connected with the spatial interaction of
              peri-substitutes leading to the migration of these substitutes from
              the plane of the naphthalene nucleus.

Card 1/2   There are 4 non-Soviet references.

SOV/63-4-3-30/31

Migration of Alkylsulfonyl Residue in Alkyl-(1-Chloronaphthyl-8)-Sulfones

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva
(Moscow Chemical-Technological Institute imeni D.I. Mendeleyev)

SUBMITTED: February 2, 1959

Card 2/2

5.3600

SOV/63-4-6-30/37

AUTHORS: Koptyug, V. A., Gerasimova, T. N., Vorozhtsov, N. N., Jr.

TITLE: Brief Communication. Isomeric Conversion of Methyl-(1-Chloronaphthyl-8)-Sulfone

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6, pp 807-808 (USSR)

ABSTRACT: In the previous work (the same authors. Khim. nauka i prom., 4, Nr 3, 414, 1959), it was shown that alkyl(1-chloronaphthyl-8) sulfone, by heating with conc. HCl, at 200-230° is isomerized into alkyl(1-chloronaphthyl-7) sulfone (III) as follows:

Card 1/4

Brief Communication. Isomeric Conversion
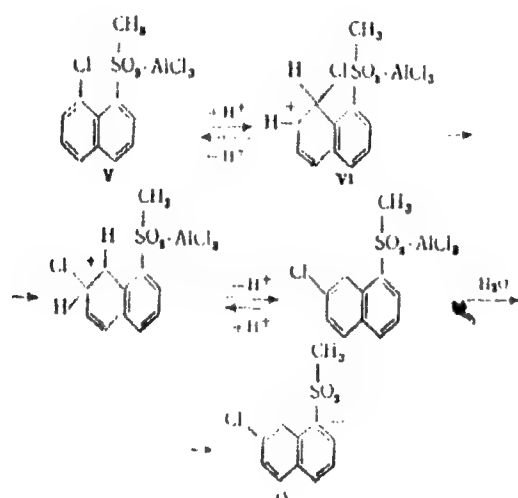of Methyl-(1-Chloronaphthyl-8)-Sulfone
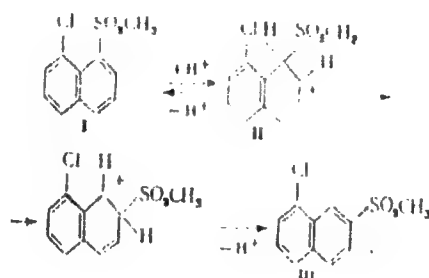
I was heated with 2 g/mole of AlCl$_3$, for 1 hr at 125°,
in the presence of dry HCl, and methyl(2-chloronaphthyl-
8) sulfone (IV) was obtained (in 50% yield) instead of
III. In the above case the migration of chlorine atom
occured, instead of methyl-sulfonyl radical migration.

Card 2/4

Brief Communication. Isomeric Conversion
of Methyl-(1-Chloronaphthyl-8)-Sulfone

SOV/03-4-6-30/37

Card 3/4

Brief Communication.   Isomeric Conversion
of Methyl-(1-Chloronapthyl-8)-Sulfone   SOV/63-4-6-30/37

In the present work, the conversion of I in the
presence of $FeCl_3$ was studied. Heating I with $FeCl_3$
(ratio: 1 to 0.5 g/mole), at 150^0 for 6 hr, in a
stream of HCl forms III. The migration of chlorine
atom was practically not observed. In the absence
of catalyst, at $230-250^0$, and in a stream of HCl,
the isomerization was not observed. There are 2 Soviet
references.

ASSOCIATION: Mendeleyev Moscow Chemical-Technological Institute
               (Moskovskiy khimiko-tekhnologicheskiy institut imeni
               D. I. Mendeleyeva)

SUBMITTED: May 10, 1959

Card 4/4

GERASIMOVA, T.N., red.; CHERNIKHOVA, M.Z., tekhn. red.

[Machine milking. Translated from the Swedish] Mekhanizatsiia
doeniia. Moskva, TSentr. biuro tekhn. informatsii, 1960. 46 p.
                                        (MIRA 14:7)

1. Russia (1923-   U.S.S.R.) Gosudarstvennyi komitet po avtoma-
tizatsii i mashinostroeniiu.
                        (Milking machines)

5.3620

77903
SOV/79-30-2-54/78

AUTHORS: Koptyug, V. A., Gerasimova, T. N., Vorozhtsov, Jr., N. N.

TITLE: Steric Hindrance and the Reactivity of Organic Compounds.
              I. Migration of the Alkylsulfonyl Radical in Alkyl
              1-Chloronaphthyl-8 Sulfones

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 612-618
              (USSR)

ABSTRACT: Isomeric transformation of 1,8-dihalonaphthalenes proceeds
              easily even without catalysts; this is explained by the
              steric interaction of the halogen atoms in periposition.
              Van der Waals' radius of Cl is 1.80 A, that of Br 1.95 A,
              whereas the distance between C_1 and C_8 in the naphthalene
              molecule is only about 2.5 A. The molecule is subjected,
              therefore, to a deformation, and to a deviation of the
              halogen atoms from the plane of the naphthalene molecule,
              followed by a change in the values of the bond angles at
              C_1 and C_8. The hybridization of the valence electrons of
              similar atoms cannot correspond any longer to the pure

Card 1/7

Steric Hindrance and the Reactivity of   77903
Organic Compounds. I   SOV/79-30-2-54/78

$(sp^2)p$ type of a plane trigonal system and approaches to some extent the tetrahedral (sp^3)-hybridization. This must facilitate the formation of an activated complex in the attack of these atoms by the electrophilic particle. The increased affinity of C_1 and C_8 atoms of the 1,8-disubstituted naphthalenes towards the electrophilic particles creates, in particular, favorable conditions for the protonation of these atoms and for the formation of σ-complexes. The authors assume, accordingly, that three types of transformations can take place in such cases, as shown in the formulas (1):

Card 2/7   FORMULA 1 ON FOLLOWING CARD (3/7)

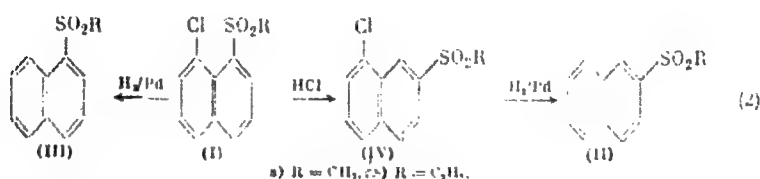Steric Hindrance and the Reactivity of
Organic Compounds.   I
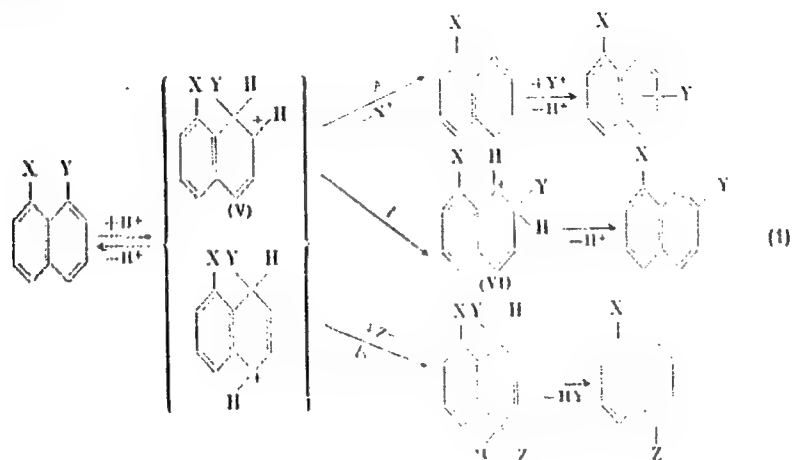
Card 3/7

Steric Hindrance and the Reactivity of
Aromatic Compounds.   I

The following transformations can serve as examples of the
above reactions: 1,8-dibromo-2,7-dihydroxynaphthalene into
1,6-dibromo-2,7-dihydroxynaphthalene, reaction B; 1,-
dichloronaphthalene into the 1,8-isomer, reaction B
(X=Y=Z=Cl); 1,8-dichloronaphthalene-3-sulfonic acid into
1,7-dichloronaphthalene, reaction B.   The present work
deals with the migration of the radical in similarly
perisubstituted alkyl 1-chloronaphthyl-8 sulfone (I):

a) R = CH₃; b) R = C₂H₅

∴ 4/7

Steric Hindrance and the Reactivity   77903
of Organic Compounds. I   SOV/79-30-2-54/78

Such sulfones were obtained on boiling for 3-5 hr
a mixture of methanol solutions of sodium ethoxide and
chloronaphthalenesulfinic acid with methyl iodide, ethyl
iodide, or benzyl chloride. The sulfone precipitate was
filtered, washed with 5% soda solution and water, and
recrystallized from methanol. The following new sulfones
were obtained: methyl 1-chloronaphthyl-5 sulfone
(mp 141.0-141.5° C); methyl 1-chloronaphthyl-7 sulfone (IVa)
(mp 160.5-161.0° C); methyl 1-chloronaphthyl-8 sulfone (Ia)
(mp 126.5-127.0° C); methyl 2-chloronaphthyl-8 sulfone
(mp 117.5-118.0° C); ethyl 1-chloronaphthyl-7 sulfone
(IVb) (mp 122.0-122.5° C); ethyl 1-chloronaphthyl-8 sulfone
(Ib) (mp 143.0-143.5° C); and benzyl 1-chloronaphthyl-8
sulfone (mp 170.5-171.0° C). Yield of the methyl
chloronaphthyl sulfones was 72-88%; that of ethyl
chloronaphthyl sulfones, 42-67%. Heating Ia and Ib with
concentrated HCl at 200° C and 220-230° C, respectively,
caused an irreversible migration of the alkylsulfonyl radical
into β-position and the formation of sulfones IVa and
IVb in 40% and 60% yield, respectively. This migration was

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Steric Hindrance and the Reactivity
of Organic Compounds.   I

77903
SOV/79-30-2-54/78

due to the steric interaction of the Cl atom and the
sulfonyl radical which caused a deviation of these
substituents from the plane of the naphthalene ring.   The
other sulfones did not change on heating with concentrated
HCl; it follows that the migration of the sulfonyl radical
is characteristic solely of the 1,8-isomers.   Elimination
of the chlorine atom was achieved by hydrogenation of the
alkyl chloronaphthyl sulfones in methanolic alkali
solution over Pd.   In this reaction, methyl 1-chloronaphthyl-5
sulfone, methyl 1-chloronaphthyl-8 sulfone, and methyl
2-chloronaphthyl-8 sulfone gave, respectively, methyl
naphthyl-1 sulfone (mp 101.5-102.0° C from methanol), and
methyl 1-chloronaphthyl-7 sulfone gave methyl naphthyl-2
sulfone (mp 141-141.5° C).   Similarly, ethyl 1-chloronaphthyl-8
sulfone gave ethyl naphthyl-1 sulfone (mp 88-89° C), and
ethyl 1-chloronaphthyl-7 sulfone gave ethyl naphthyl-2
sulfone (mp 42-44.5° C).   Yield of the dechlorinated
sulfones was 83.5-97%.   There are 1 table; and 31 references,
7 U.S., 6 U.K., 1 Canadian, 2 French, 1 Swedish, 1 Danish,
7 German, and 6 Soviet.   The 5 most recent U.S. and U.K.
references are: K. B. Everard, L. E. Sutton, J. Chem. Soc.,
1949, 2312; D. M. Donaldson, J. M. Robertson, ibid., 1953,

Card 6/7

Steric Hindrance and the Reactivity of
Organic Compounds.   I

77903
SOV/79-30-2-54/78

17; E. Harnik, F. H. Herbstein, G. M. J. Schmidt, ibid.,
1954, 3288; same authors, ibid., 1954, 3303; L. Bateman,
F. W. Shipley, ibid., 1958, 2888.

ASSOCIATION: D. I. Mendeleyev Moscow Chemical-Technological Institute
(Moskovskiy khimiko-tekhnologicheskiy institut imeni
D. I. Mendeleyeva)

SUBMITTED: February 24, 1959

Card 7/7

VOROZHTSOV, N.N., mladshiy; GERASIMOVA, T.N.; KARPOVA, Ye.N.; LISENKOVA,
    G.S.

Preparation of 5-nitro-1,4-naphthoquinone and its condensation
with dienes. Zhur. VKHO 5 no.4:474-475 '60.   (MIRA 13:12)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
            (Naphthoquinone)   (Olefins)

KOPTYUG, V.A.; GERASIMOVA, T.N.; PLAKHOV, V.A.

Isomeric transformations of sulfones of the napthtalene series in
the presence of metal halides. Zhur.ob.khim. 31 no.5:1611-1621
My '61.   (MIRA 14:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
                (Sulfone)   (Isomerization)

KOPTYUG, V.A.; GERASIMOVA, T.N.; VOROZHTSOV, N.N., mladshiy

Steric hindrances and reactivity of organic compounds. Part 11:
β-Naphthalenesulfonic acid as a catalyst of isomerization of
compounds with steric hindrances. Zhur.ob.khim. 31 no.10:3341-
3343 O '61.   (MIRA 14:10)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo
otdeleniya Akademii nauk SSSR.
          (Naphthalenesulfonic acid)   (Isomerization)

KOPTYUG, V.A.; GERASIMOVA, T.N.

Isomerisation of sulfones of the benzene series. Zhur.ob.khim.
32 no.11:3780-3796 N '62.   (MIRA 15:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo
otdeleniya AN SSSR.
                (Sulfones)   (Isomerization)

GERASIMOVA, T. N.

Dissertation defended for the degree of Candidate of Chemical Sciences
at the Joint Academic Council on Chemical Sciences; Siberian Branch

"Isomeric Transformations of Aromatic Type Sulfones."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

GERASIMOVA, T.N.; KOPTYUG, V.A.

Isomeric transformations of methyl (chloronaphthyl) sulfones.
Zhur.ob.khim. 33 no.2:601-606 F '63.   (MIRA 16:2)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo
otdeleniya AN SSSR.
            (Sulfone)   (Isomerization)

GERASIMOVA, T.N.; BUSHMELEV, V.A.; KOPTYUG, V.A.

Rearrangement of N-aryl and N-akylsufonyl derivatives of primary aromatic amines to aminosulfones. Zhur. org. khim. 1 no.9:1667-1673 S '65.   (MIRA 18:12)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. Submitted October 20, 1964.

LAPTEV, S.A., kand. tekhn. nauk; GERASIMOVA, T.N., red.; CHERNIKHOVA, M.Z., tekhn. red.

[The 1960 automotive exhibit in Geneva] Avtomobil'naia vystavka 1960 goda v Zheneva. Moskva, TSentr. biuro tekhn. informatsii, 1960. 31 p.   (MIRA 14:7)
   (Automobiles—Exhibitions)   (Geneva—Exhibitions)

Gerasimova, T. P.

//

RAPID DETERMINATION OF ZINC IN ALUMINIUM AND SILICON ALLOYS . T. P.
GERASIMOVA (ZAVOD. SAB., 1941, 10, 309; Chem. Zentr.,1942, 113, (11), 1041
C.Abs., 1943, 37, 86b1).-(IN Russian). The method provides for precipita t-ing
Zn Sfrom the Na SH solution of the alloy, dissolving the ZnS, and
titrating with Na2S2O3 after adding KI and K3Fe(CN)6 in Ch3.COOH solution.

GERASIMOVA, T.P.; POLOVINKIN, A.A., doktor geograficheskikh nauk, professor, redaktor; YELAGIN, V.D., redaktor; GARNEK, V.P., tekhnicheskiy redaktor.

[Weather observations in teaching of geography in the seven-year school] Nabliudenie nad pogodoi v prepadovanii geografii v semiletnei shkole. Pod red. A.A. Polovinkina, Moskva, Izd-vo Akad.pedagog. nauk RSFSR, 1951. 103 p.   (MLRA 8:8)

1. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR (for Polovinkin)
        (Meteorology--Observations)

GERASIMOVA, T. P.

Speech training in Geography classes of 5th, 6th and 7th grade students.
Geog. v shkole No 3, 1952.

GERASIMOVA, T. P.

"Weather observations in geography teaching in the seven-year school."
T. P. Gerasimova. Reviewed by M. I. Shcherban'. Geog. v shkole, No 4,
1952.

GERASIMOVA, T.P.; SMIRNOVA, N.P., redaktor; RYBIN, I.V., tekhnicheskiy
redaktor.

[Weather observation in the teaching of geography in the seven-
year school] Nabliudeniia nad pogodoi v prepodavanii geografii
v semiletnei shkole. Izd. 2. Moskva, Gos. uchebno-pedagog. izd-
vo Ministerstva prosveshcheniia RSFSR, 1954. 92 p. (MLRA 7:8)
     (Weather) (Physical geography--Study and teaching)

ZASLAVSKIY, Iosif Ivanovich; GERASIMOVA, Tam'yana Pavlovna; RODIONOVA,
F.A., redaktor; MAKHOVA, N.N., tekhnicheskiy redaktor

[Physical geography; a beginner's course. Textbook for class 5 of
the seven-years and secondary schools] Fizicheskaia geografiia;
nachal'nyi kurs. Uchebnik dlia V klassa semiletnei i srednei shkoly.
Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia
RSFSR, 1955. 160 p. 3 maps (insert).   (MIRA 8:7)
        (Physical geography)

GERASIMOVA, Tat'yana Pavlovna; ZASLAVSKIY, I.I., red.; GALKIN, P.D., red.; TARASOVA, V.V., tekhn. red.

[Methods of teaching an elementary course in physical geography in the fifth grade] Metodika prepodavaniia nachal'nogo kursa fizicheskoi geografii v V klasse. Moskva, Izd-vo Akad. pedagog. nauk RSFSR, 1958. 335 p.   (MIRA 11:7)
                    (Physical geography—Study and teaching)

ZASLAVSKIY, Iosif Ivanovich; GERASIMOVA, Tat'yana Pavlovna; RODIONOVA,
F.A., red.; ANDREYEVA, K.A., red.kart; MAKHOVA, N.N., tekhn.red.

[Physical geography (beginner's course) textbook for the fifth
grade of a seven-year school and secondary school] Fizicheskaia
geografiia (nachal'nyi kurs); uchebnik dlia V klassa semiletnei
i srednei shkoly. Izd.6. Moskva, Gos.uchebno-pedagog.izd-vo
M-va prosv.RSFSR, 1960. 160 p.   (MIRA 13:5)
            (Physical geography)

BARSKAYA, Kh.I.; GERASIMOVA, T.P.; MATRUSOV, I.S.; NAZAROCHKINA, V.A.;
SHCHENEV, V.A.

Discussing special methods of teaching geography. Geog. v shkole
25 no.2:86-87 Mr-Ap '62. (MIRA 15:2)
(Geography--Study and teaching)

BIBIK, A.Ye., nauchnyy sotr.; GERASIMOVA, T.P., nauchnyy sotr.;
    SAMOYLOV, I.I., nauchnyy sotr.; PADEZHNOV, A.I., red.;
    NOVOSELOVA, V.V., tekhn. red.

[Teaching economic geography in secondary schools]O prepodavanii
ekonomicheskoi geografii v srednei shkole. Pod red.I.I.Samoilova.
Moskva, Izd-vo APN RSFSR, 1962. 86 p.   (MIRA 16:1)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut ob-
shchego i politekhnicheskogo obrazovaniya.
              (Geography, Economic—Study and teaching)

ACCESSION NR: AT3008538   S/2984/63/000/000/0023/0027

AUTHORS: Belyayev, Yu. A.; Gerasimova, T. S.; Dravskikh, Z. V.; Mikhel'son, N. N.;
Sumin, V. S.; Shkutova, N. A.; Shumakher, A. V.

TITLE: Control system for the RM-700 telescope

SOURCE: Novaya tekhnika v astronomii; materialy* soveshch. Komissii
priborostroyen. pri Astronom. sovete AN SSSR, Moskva, 18-20 apr. 1961 g. Moscow,
Izd-vo AN SSSR, 1963, 23-27

TOPIC TAGS: control system, automatic control, RM 700 telescope, telescope, ETsUM
digital control machine

ABSTRACT: A 700-mm reflector telescope (called the RM-700) has just been built at
the Pulkovskaya observatoriya (Pulkovo Observatory). It will be equipped with a
double control system. One aspect is a semiautomatic control from a key or with
one of two panels operating by semiautomatic control. The position of the tele-
scope will be computed on this panel, each coordinate having a double-metering
selsyn connection operating as an indicator. The hour mechanism will be a synchro-
nous motor, supplied by a quarts-crystal clock. The second part of the system is

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ACCESSION NR: AT3008538

automatic control by means of a digital electronic control device (ETsUM). This device has been described by Yu. A. Belyayev (1961, Izv. GAO AN SSSR, 169). It operates with a binary code of sidereal time, computed in angular scale from the panel. This involves the use of a quartz-crystal clock running on sidereal time, a frequency divider and power amplifier, a frequency converter, and a cumulative adder. The operation of the parts is described in considerable detail. "B. N. Batanov (deceased), Yu. N. Gell', and A. V. Korolev participated in this work." Orig. art. has: 7 figures.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory AN SSSR)

SUBMITTED: 00   DATE ACQ: 16Oct63   ENCL: 00

SUB CODE: AA, IE   NO REF SOV: 004   OTHER: 000

Card   2/2

Gerasimova V. A

USSR/ Analytical Chemistry - Analysis of Inorganic Substances   G-2

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12037

Author   : Kolobova K.K., Gerasimova V.A.
Title   : Colorimetric Method for the Determination of Sodium
             in Soda-Lime Glass without Taking a Weighed Sample

Orig Pub : Zavod. laboratoriya, 1956, 22, No 7, 794-795

Abstract : On the cleansed surface of a standard and of the glass
             sample being tested, within a specially provided paraffin-
             enclosed area, are placed 2 drops of H_2F_2 and allowed to
             remain there for 5 minutes while being stirred with a pa-
             raffin-coated glass rod. After 5 minutes into each of the
             paraffin enclosed areas are added 2 drops of water and the
             resulting solutions are transferred, by means of glass ca-
             pillaries, into Pt crucibles. The paraffin enclosed areas
             are rinced 4-5 times with water, which is applied 1 drop
             at a time, and the washings are added to the previously
             obtained solutions. After this there is added to each

Card 1/3

USSR/ Analytical Chemistry - Analysis of Inorganic Substances   G-2

Abs Jour   : Referat Zhur - Khimiya, No 4, 1957, 12037

solution 1 drop of H_2SO_4 1:3, the mixture is evaporated
until evolution of white fumes ceases, 8-10 drops of wa-
ter and 1 drop of H_2SO_4 1:3, are added and the mixture is
boiled to clarify the liquid. The completely transparent
solutions are transferred into 50 ml beakers and are again
evaporated almost to dryness. The residues are dissolved
in a least possible amount of water, 5-6 ml C_2H_5OH and
5-6 ml of $UO_2(C_2H_3O_2)$ solution are added to each, the mix-
ture is thoroughly stirred, allowed to stand for one hour
and thereafter the precipitate is filtered through a "Blue
Band" filter, washed by decantation 2-3 times with alcohol,
then several times with a 2.5:1, ether-alcohol mixture, un-
til a reaction for U is no longer obtained. Washed preci-
pitates together with filtrates and funnels are placed in
a drying oven at $60-70^\circ$ for 10-15 minutes, are then trans-
ferred into small beakers, dissolved in hot 2% CH_3COOH,
filtered through "White Band" filters and collected in

Card 2/3
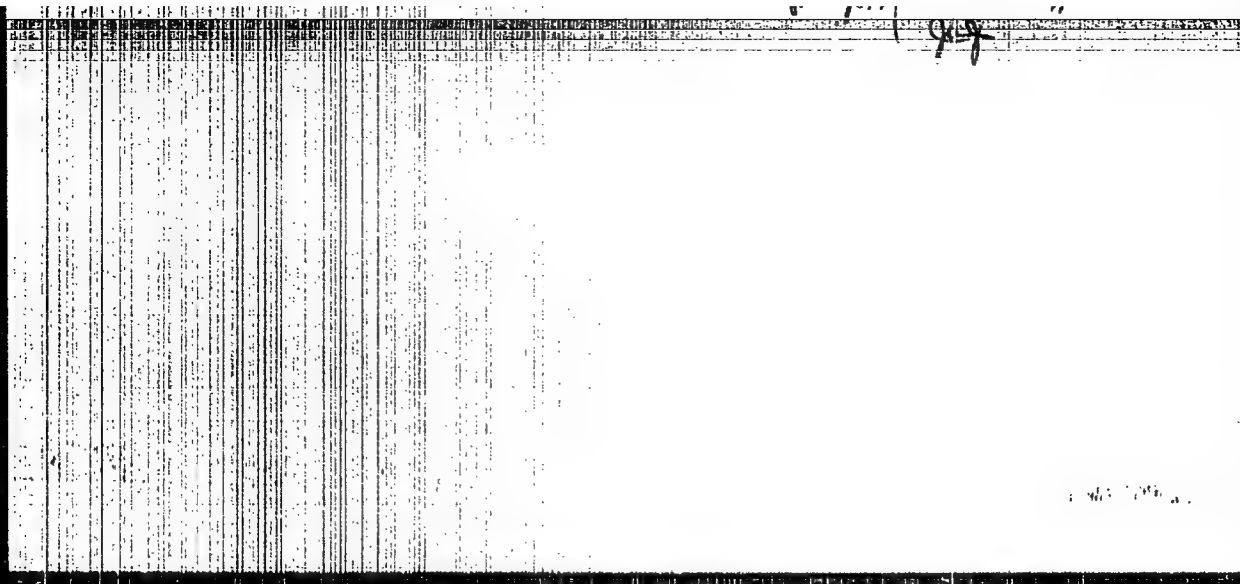
131-1-6/14

AUTHORS: Volosevich, O. N. , Gerasimova, V. D. , Lyutsareva, L. A.

TITLE: Ceramic Pyroscopes for Temperature Measurement in a Regenerating
             Medium (Keramicheskiye piroskopy dlya izmereniya temperatur v vos-
             stanovitel'noy srede)

PERIODICAL: Ogneupory, 1958, Nr 1, pp. 23 - 26 (USSR)

ABSTRACT: A. V. Tereshchenko and I. Ye. Dudavskiy point out that the tempera-
             ture of the fall of pyroscope depends on a number of factors, such
             as: dispersion, chemical and mineral composition of the pyroscopes,
             their shape, dimensions and their manner of installation , as well
             as the speed of the temperature increase. Various admixtures in
             the composition of the pyroscope may change the temperature of
             their fall in both directions, in dependence on the composition of
             medium in the furnace. According to the data by Vickers the in-
             fluence of the admixtures Fe_2O_3 in different gas mediums is cha-
             racterized by figures which are recorded in table 1. The pyroscope
             produced both in this country and abroad consist of clay, kaolin,
             quartz, feldspar, marble and so on with admixtures. Such pyroscopes
             are used in furnaces with oxidizing or neutral medium . Furnaces
             with regenerating medium were recently widely spread. They possess
Card 1/3   a hydrogen-ammonia medium and others and are used for annealing

131-1-6/14

Ceramic Pyroscopes for Temperature Measurement in a Regenerating Medium

and soldering various metals for sintering hard-metal alloys, for burning highly aluminiferous ceramics of pure oxides which require a high temperature and a regenerating medium respectively for burning. In order to be able exactly to measure the temperature in electric furnaces with regenerating medium in the range of from 1500 to 1800^{0}C, tests were performed with various existing devices and pyroscopes. After these tests had yielded a negative result (as may be seen from table 2 and figure 1) pyroscopes of aluminum oxide (alumina) with an admixture of fluxing agents were produced which are destined for use in a regenerating medium (π KB). For the purpose of determining the composition of these pyroscopes, tests with synthetic fluxing agents were performed, as is to be seen from table 3. As aluminum oxide the authors used an argillaceous earth of the brand Го burnt at 1640^{0}C in a regenerating medium; its chemical composition is given in table 4. The pyroscope with 30 % admixture of fluxing agents showed fall temperatures which are recorded in table 5. Pyroscopes with admixture of 5 to 50 % of the fluxing agent N 3 behaved as may be seen from table 6. The pyroscopes were installed on corundum bases according to GOST 4069-48. The comparison of the operation of these pyroscopes Card 2/3   in a nitrogen-hydrogen medium and in krypton furnace is shown in

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Ceramic Pyroscopes for Temperature Measurement in a Regenerating Medium

table 7. Figure 2 shows a photograph of the pyroscopes ПKN 163, 167 and 169, and of the new pyroscope ПKB - 149 which are placed in the electric furnace with nitrogen-hydrogen medium at 1480°C. There are 2 figures, 7 tables, and 5 references, 4 of which are Slavic, and 1 English.

ASSOCIATION: Experimental Plant imeni Dzerzhinskiy
(Opytnyy zavod im. Dzerzhinskogo)

AVAILABLE: Library of Congress
1. Pyroscopes-Application

Card 3/3

LUKOMSKIY, G.I., kand.med.nauk; GERASIMOVA, V.D.

Prolonged local anesthesia in bronchoscopy and bronchography.
Vest.otorin. 23 no.2:77-80 F '61.   (MIRA 14:4)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. I.S.
Zhorov) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M. Sechenova.
            (BRONCHOSCOPY)   (BRONCHI)

ROZENSHTRAUKII, L.S. (Moskva,Volokolamskoye shosse,d.14-b,kv.84);
LUKOMSKIY, G.I.; GERASIMOVA, V.D.; SANPITER, I.A.

Use of adhaegon for anesthesia of the tracheobronchial tree.
Grud. khir. 2 no.3:82-84 My-Je '60.   (MIRA 15:3)

1. Iz kafedry rentgenologii (zav. - prof. Yu.N. Sokolov) TSentral'-
nogo instituta usovershenstovaniya vrachey i kafedry fakul'tetskoy
khirurgii (zav. - prof. I.S. Zhorov) i I Moskovskogo ordena Lenina
meditsinskogo instituta na baze 61-y klinicheskoy bol'nitsy (glavnyy
vrach - kand.med.nauk L.N. Vasil'yevskaya).
                    (ANESTHESIA, INTRATRACHEAL)
                    (BRONCHI--SURGERY)

L 4091-66 EWT(m)/EWP(t)/EWP(b)   IJP(c)   JD

ACC NR: AP5026487   SOURCE CODE: UR/0286/65/000/019/0016/0016

INVENTOR: Chernykh, V. Ya.; Talanov, N. D.; Gerasimova, V. D.

ORG: none

TITLE: Preparation of indium phosphide. Class 12, No. 175049 [announced by Scientific Research Institute of Fertilizers, Insecticides, and Fungicides (Nauchno-Issledovatel'skiy institut udobreniy i insektofungitsidov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 16

TOPIC TAGS: indium phosphide, inorganic synthesis

ABSTRACT: An Author Certificate has been issued for a preparative method for indium phosphide involving the heating of metallic indium with phosphorus trichloride. To increase the yield and improve the purity of the end product, the reaction is conducted at 700—750C with subsequent cooling of the reaction mixture to room temperature.   [BO]

SUB CODE: IC,OC/ SUBM DATE: 13Jan65/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4128

KVA

Card 1/1   UDC: 546.682
                                      546.181.1.07

RUNOV, V.N.; GERASIMOVA, V.F.

Some features of physiological processes in the cotton plant.
Dokl.AN Uz.SSR no.3:50-52 '59.   (MIRA 12:7)

1. Institut genetiki i fiziologii rasteniy AN UzSSR. Predstavleno
akademikom AN UzSSR S.S.Kanashom.
                    (Cotton)

RUKOV, V.I.;GERASIMOVA, V.F.

Biochemical feature of the ripening of seeds from cotton varieties
which mature at different times. Dokl. AN Uz.SSR no.10:47-50 '59
(MIRA 13:3)

1. Institut genetiki i fiziologii rasteniy AN UzSSR. Predstavleno
akademikom AN UzSSR S.S. Kanashom.
(Cotton)

ALEKSANDROV, M.K.; GERASIMOVA, V.F.

Quality of raw cotton and fiber following the defoliation of cotton
by means of new chemicals. Izv. AN Uz. SS^R no. 9:43-47 '56.
(MIRA 14:5)

(Cotton) (Defoliation)

GERASIMOVA, V.P.

Effect of some amino acids on the rate of ripening of the cotton
plant. Dokl. AN SSSR 161 no.2:487-489 Mr '65.

(MIRA 18:4)

1. Institut eksperimental'noy biologii tekhnicheskikh i zernovykh
kul'tur AN UzSSR. Submitted June 29, 1964.

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Characteristics of nitrogen metabolism in the generative
tissues of some cotton varieties differing in their ripening
time. Fiziol. rast. 12 no.3:453-456 My-Je '65.

(MIRA 18:10)

1. Institut eksperimental'noy biologii rasteniy AN UzSSR,
Tashkent.

BYKOV, V.T.; GERASIMOVA, V.G.

Effect of the thermal treatment of natural sorbents on
n-heptane vapor adsorption. Trudy DVFAN SSSR.Ser.khim.
no.7:47-51 '65.   (MIRA 18:12)

BYKOV, V.T.; GERASIMOVA, V.G.; ZALEVSKIY, N.I.

Studying the porosity of natural sorbents using capillary condensation and impression of mercury. Izv. AN SSSR Otd. khim. nauk no.10:1250-1252 O '57.   (MIRA 11:3)

1. Laboratoriya adsorbtsionno-strukturnogo i khromatograficheskogo analiza Dal'nevostochnogo filiala AN SSSR i Kafedra khimii Dal'-nevostochnogo politekhnicheskogo instituta im. Kuybysheva.
(Sorbents) (Porosity)

GERASIMOVA, V.G.

Adsorption of water and heptane vapors on natural sorbents. Trudy
DVFAN SSSR, Ser. khim. no.3:94-101 '58.   (MIRA 11:5)
                    (Adsorption)   (Water)   (Heptane)

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Adsorption of heptane vapors on natural sorbents of various degrees
of dampness. Trudy DVFAN SSSR. Ser. khim. no.3:109-116 '58.
(Soviet Far East—Sorbents)   (MIRA 11:5)

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Utilization of the natural sorbents of the Far East. Trudy DVFAN
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Celebration for a Far Eastern scholar. Soob.DVFAN SSSR no.9:
152-153 '58.   (MIRA 12:4)
          (Bykov, Vsevolod Tikhonovich, 1905-)

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Sorption of heptane by heat-treated natural sorbents of the Far East.
Soob.DVFAN SSSR no.10:3-9 '59.   (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirskogo otdeleniya
AN SSSR.
            (Heptane)   (Sorbents)

ZIMOV, V.Y.; GERASIMOVA, V.G.; ZILNOIN, I.I.

Investigation of the porosity of natural sorbents by methods
involving capillary condensation and impregnation of mercury
under pressure. Trudy DFAN SSSR. Ser. khim. no.4:17-23 '60
(MIRA 14:10)

(Sorbents)
(Porosity)

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Adsorption of benzene vapor by natural sorbents of the Far
East. Trudy DFAN SSSR. Ser. khim. no.4:41-48 '60.

(MIRA 14:10)

(Far East—Sorbents)
(Benzene)

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Dynamic action of natural sorbents in the sorption of benzene vapors. Trudy DPAN SSSR. Ser. khim. no.4:49-54 '60.
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(Sorbents)
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                        (Bleaching agents)
                        (Catalysts)

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of the Ukraine with Russia. Sov.etn. no.3:94-100 '54.(MIRA 7:11)
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"Materials on the Study of the State of Infection of Suctorial
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Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
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